ES/TE

March 17, 2005

Memorandum

To: TJ Miller, Region 3 Endangered Species Program Manager

From: Ron Refsnider, Region 3 Listing Coordinator & Wolf Recovery Coordinator

Subject: Endangered Species Permit Request from Wisconsin DNR

On February 11, 2005, Wisconsin DNR requested from Region 3 a section 10(a)(1)(A) permit that would authorize various forms of take of gray wolves in Wisconsin. This request resulted from the January 31, 2005, ruling by the U.S. District Court for the District of Oregon that vacated the Service's April 1, 2003, reclassification of Wisconsin wolves from endangered to threatened status. This vacature also terminated the implementation of the section 4(d) special regulations that allowed various forms of take of gray wolves by state and tribal authorities.

Wisconsin DNR requests several forms of take which I have organized into the following three "levels":

Level 1
Immediate re-issuance of Endangered Species Subpermit 03-05 (under Permit 697830) in order for "the WI DNR to continue conducting research, surveys and control efforts on the gray wolf, Canis lupus, which is now again listed as endangered…." This subpermit was issued by Region 3 on March 3, 2003, and it expired on December 31, 2003. WI DNR did not request its renewal at that time, because Wisconsin wolves were reclassified to federally threatened status on April 1, 2003, and a federal permit was no longer needed by the DNR to carry out these activities.

The previous Subpermit 03-05 included:
- lethal take of up to 8 wolves verified as being involved in repeat depredation incidents (excluding attacks on free roaming dogs and game farm animals)
- lethal take of up to 8 wolves at two specific farms with chronic depredation problems
- the combined lethal take is limited to 12 wolves annually
- Although not specified in the Subpermit, FWS' BO anticipates additional (incidental) mortality of up to 2 wolves that accidentally die, or are seriously injured and require removal from the wild or euthanization. This incidental take could be the result of trapping for radio-tracking or other research activities, as well as from the trapping of pups that would otherwise have been released.
- Thus, the subpermit and BO covered the potential take (mortality or removal from the wild) of up to 14 wolves annually.

Level 2
WI DNR also requests several modifications to Subpermit 03-05; the most important are:
(a) expansion of lethal control of depredating wolves at farms experiencing chronic wolf depredation:

previous limit (condition 10): a maximum of eight wolves may be taken within one-half mile of the James and Marcia Mihalek farm and the James Gadamus farm.

requested change: a maximum of 24 wolves may be taken within one-half mile of farms with chronic wolf depredation (verified depredation in at least 2 of the last 5 years).

(b) add: "Severely injured wolves may be euthanized" up to 4 annually (considered by DNR to be incidental taking).

(c) add: "Wolves showing signs of mange or other serious, contagious disease may be euthanized instead of translocated or relocation." No limit is specified.

Level 3

Issuance of a "special, Recovery Permit for Wolf Control Activity in Wisconsin. This special Recovery Permit should authorize all the same activities granted to Wisconsin under the 4d rule listed in the Federal Register on April 1, 2003."

FWS Actions to Date

On February 28, 2005, we issued a new subpermit 05-03 to WI DNR that authorized "level 1" take, except that it does not authorize take of up to 8 wolves at two specific chronic farms. Thus, the new subpermit and new BO cover the intentional take of up to 8 wolves and the incidental take of up to 2 wolves. This subpermit authorized WI DNR and their designated agents to resume most of the wolf research and depredation control activities they had been conducting prior to the April 1, 2003, reclassification and 4(d) regulations.

We are currently reviewing the other forms of take that were requested. A new Biological Opinion under section 7 of the ESA is being developed by our Green Bay Field Office to evaluate (1) euthanizing severely injured wolves, (2) euthanizing diseased wolves, and (3) taking wolves under the conditions specified under the 2003 4(d) rule.

We currently are not evaluating the taking of up to 24 wolves at or near farms with a history of chronic depredation (level 2(a)). Depending upon interpretation of this part of the request (that is, whether a verified wolf depredation in the current year is a prerequisite for such take), this form of take is (a) either a subset of the depredation control activities specified under the 2003 4(d) rule (i.e., Level 3 take), or (b) is a form of preventive/proactive lethal depredation control that has not been permitted or carried out in any Midwestern state and would require more detailed review. Conversations with Dave Ruid (USDA-WS; 3/9/05) and Adrian Wydeven (WI DNR; 3/10/05) indicated that this form of take is intended to be a subset of the type of lethal control authorized under the previous 4(d) rule, and that there is no intent to gain authority for preventive/proactive lethal control.

Evaluation

As a result of the 22-month period between the finalization of the 2003 4(d) rules and the January 31, 2005, ruling by the Oregon District Court, we have two years of empirical data on the potential impacts of the Level 3 take that is requested by WI DNR.

Lethal control of depredating wolves will be limited by several conditions that applied to the 2003 section 4(d) special rules:

- the evidence at the scene is examined and agency officials have determined that the depredation was likely to have been caused by a gray wolf
- depredation is likely to be repeated at the site
- the taking must be performed in a humane manner
- young of the year taken before August 1 must be released rather than killed.

In addition, WI DNR's Depredation Control Guidelines (Wisconsin DNR 2002) which will also constrain lethal control of depredating wolves, are somewhat more restrictive than our previous 4(d) regulations in two ways, which will result in less impact on WI wolves than could have occurred if the 4(d) rules continued to be implemented as finalized in 2003:

- trapping in Wolf Managements Zones 1 and 2 (where nearly all WI wolves occur) will be done within 0.5 miles from the depredation site; our 4(d) rule allowed trapping up to 1 mile from the depredation site.
- lethal control will not be carried out for wolves who have attacked and/or killed free-roaming dogs on public land; the 4(d) rule allowed lethal control of wolves attacking/killing any "lawfully present livestock or domestic animals."

<u>Lethal Depredation Control Since April 1, 2003, under WI DNR Depredation Control Guidelines</u>
(data from Wydeven and Wiedenhoeft 2004; Wydeven et al. 2004, 2005; Wydeven pers. comm., 3/10/05)

May 2003 – 4 euthanized by WS for depredation control (3 probably from Riverside Pack, Burnett Cnty;1 from Blue Hills Pack, Barron Cnty.)
June – 0 euthanized
July – 1 euthanized (probably from Riverside Pack)
August – 12 euthanized (11 Bayfield, 1 Taylor County)
Sept.-Dec. – 0 euthanized
Jan.-Mar. 2004 – 0 euthanized
April – 1 euthanized (Long Lake Pack, Rusk Cnty.)
May – 3 euthanized (2 from Bibbon Swamp Pack, Bayfield Cnty; 1 unknown Rusk Cnty. pack)
June – 4 euthanized (1 each from Poplar River Pack, Douglas Cnty.; Poplar River Pack, Douglas Cnty; Blue Hills South Pack, Barron Cnty; and probably Ino Swamp Pack, Bayfield Cnty.)
July – 4 euthanized (Bearsdale Pack, Bayfield Cnty; Oconto River Pack, Oconto Cnty; Bibbon Swamp Pack, Bayfield Cnty; and an unknown pack in Burnett Cnty.)
August – 8 euthanized (3 from Lake Nebagamon Pack, Douglas Cnty; 2 form Blue Hills South Pack, Barron Cnty; 1 from Bibbon Swamp Pack, Bayfield Cnty; 1 from Mondeaux Flowage Pack, Taylor Cnty; and 1 from Moquah Pack, Bayfield Cnty.)
Sept. – 0 euthanized
Oct. – 4 euthanized (all from Long Lake Pack, Rusk Cnty.)
Nov. – Dec. – 0 euthanized
Jan. 2005 – 0 euthanized (lethal control authority under the 4(d) rule ended on 1/31/05)

<u>Summary of Lethal Depredation Control:</u>

2003 – 17 euthanized (from May-Dec.; generally depredations don't begin until late April); 8 were pups, so the 9 adults represent **2.7%** of the late winter population of 335 wolves.
2004 – 24 euthanized (Jan.-Dec); 4 were believed to be pups, so the 20 adults represent **5.4%** of the late winter population of 373 wolves.
2005 – none euthanized during January, the only period in 2005 when lethal control was authorized by the 4(d) rule.

These percentages are slightly higher than the 2 to 3 percent that we predicted in our 2003 Final Reclassification Rule (USFWS 2003). Those earlier predictions were based on Minnesota depredation control data from the early 1980s. The Minnesota depredation situation is different from that in Wisconsin in two important aspects that would result in relatively less need for lethal depredation control actions in Minnesota:

- In the early 1980s Minnesota wolves were largely confined to the highly forested northeastern corner of the state, consisting primarily of public lands with few livestock operations and limited opportunities for wolves to become involved in livestock depredations
- At that time a large percentage of Minnesota wolves resided in Minnesota Wolf Management Zone 1, where all forms of take for depredation control are prohibited.

Because the occupied wolf range of northern Wisconsin is more of a mosaic of farms and forests, and lacks a wolf "sanctuary" comparable to Minnesota Wolf Management Zone 1, it should be expected that depredation control actions in Wisconsin may result in taking a somewhat higher percentage of the winter wolf population than was taken in the years when Minnesota had a relatively small wolf population.

Despite the slightly higher percentage of Wisconsin wolves killed for depredation control, it is clear that this mortality, in combination with other forms of mortality (both natural and human-caused), has not prevented the continued growth of the Wisconsin wolf population. The estimated Wisconsin population has continued to increase annually over the last 11 years, and the preliminary estimate of the 2005 population (Wydeven et al. 2004; pers. comm., March 10, 2005) continues that increase. (The final population estimate for 2005 will not be available until late April or May 2005.)

Year	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
pop.	40	57	83	99	148	180	205	248	257	327	335	373	400
% incr.	---	42.5	56.6	12.3	49.5	21.6	13.9	21.0	3.6	27.2	2.4	11.3	7.2

At some point wolves will have reoccupied the most suitable habitat areas in Wisconsin; the population growth is expected to slow and eventually cease, and the wolf population will plateau at some unknown level. Due to the variability in a number of demographic and environmental factors, the wolf population will likely bounce above and below that level from year to year once the plateau is reached. The population data from the last three to five years may be showing signs of this plateau effect.

Wisconsin DNR's wolf management plan calls for an off-reservation wolf population of at least 350 wolves (Wisconsin DNR 1999). The Service's Recovery Plan for the Eastern Timber Wolf has a recovery goal of a minimum of 100 wolves in Wisconsin and the Upper Peninsula of

Michigan combined for at least five years (USFWS 1992). The Wisconsin wolf population, even with the impacts of two successive years of lethal depredation control, continues to greatly exceed both goals.

Euthanizing Diseased Wolves

Wisconsin DNR also has requested authority to euthanize diseased wolves that have been captured for various reasons. Both mange and canine parvovirus (CPV) have been documented as serious diseases among Wisconsin wolves, and both are believed to have slowed wolf population growth in the State in past years (USFWS 2003, Wisconsin DNR 1999).

The largest cause of death for Wisconsin wolves is winter hypothermia induced by fur loss from severe infestations of sarcoptic mange mites. Over the last five years mange has been the primary cause of death for 26 percent of the radio-collared wolves found dead in Wisconsin (radio-collared wolves provide the least biased data on wolf mortality), ranging from 14 percent of all mortalities in 2002 to 33 percent of mortalities in 2000. Mange is easily spread to other pack members, and wolves with severe cases are likely to die from exposure during winter conditions. Therefore, euthanizing captured wolves with severe cases of mange is not likely to increase wolf mortality, and may actually decrease mange-related mortalities by inhibiting its spread, thus promoting wolf recovery in the State.

Over the last five years severe cases of mange have killed an average of 6.1 percent of Wisconsin's radio-collared wolves, ranging from 2.4 percent in 2002 to 8.2 percent in 2000 (Wydeven in litt. 2005). Based on a capture rate of 31 wolves in 2004 (excluding wolves euthanized at depredation sites), euthanizing 6.1 percent (the expected rate of cases of severe ménage) would result in the deaths of two wolves; euthanizing 8.2 percent (based on the worst year for mange mortalities during the last five years) would result in the deaths of three wolves. Rather than being a form of additional mortality, these are compensatory mortalities, as the wolves likely would have died subsequently if they were released, and may have spread mange to their packmates.

Euthanizing Seriously Injured Wolves

Wisconsin DNR has also requested authority to euthanize seriously injured wolves. Such injuries can result from trapping for research purposes, incidental captures by coyote or other trappers, depredation control trapping of pups who would otherwise be released before August 1, vehicle collisions, fights with other wolves or animals, and other causes. Seriously injured wolves frequently will die if released, due to their inability to capture prey or defend themselves against other wolves. In 2004 there were five such injuries qualifying for euthanization; 4 were the result of vehicle collisions, and the fifth was a wolf found in very poor conditions with a plastic pail stuck on its head (Wydeven et al. 2005). Euthanizing such wolves is also is compensatory mortality, rather than additive to other mortality factors.

Conclusion

After evaluating the available data on Wisconsin wolves, I conclude that euthanizing wolves with severe cases of mange (and other highly contagious diseases like CPV) and those with serious injuries will not measurably increase wolf mortality in Wisconsin. To the contrary,

euthanizing severely diseased wolves may actually decrease disease-caused mortality in wild wolves. I strongly support a permit or subpermit to Wisconsin DNR that authorizes these two forms of take.

Furthermore, data from two years of lethal depredation control in Wisconsin, as well as over 25 years of data from very similar lethal depredation control activities in Minnesota, lead to the inescapable conclusion that such activities have not interfered with the maintenance of viable wolf populations that greatly exceed federal recovery goals for both states. Such depredation control activities are fully supported in the Federal and State recovery plans for gray wolves. Limited lethal depredation control actions of this type, while perhaps disturbing to some people, are supported by years of empirical data that demonstrate their proper place in a comprehensive recovery and management program for gray wolves in the Midwest.

The depredation control take that would be carried out by WI DNR and the State's designated agent, APHIS-Wildlife Services, is identical in scope and methodology to that which has been carried out through January 2005 by Wildlife Services, acting as an agent of the State and carrying out the control of depredating wolves as authorized for the State under the 2003 special regulations under ESA section 4(d). The impacts of that take have been as we predicted in our 2003 final rule (USFWS 2003), and there is no reason to suspect a change in impacts as the depredation control activities are resumed under ESA section 10(a)(1)(A) permit authority.

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